FACT SHEET

CALIFORNIA ENERGY COMMISSION Efficiency Division

CERTIFICATION AND VERIFICATION OF LIGHTING CONTROLS

The 2013 Building Energy Efficiency Standards (Energy Standards) provisions related to lighting controls specifically address:

- Certification and Verification Requirements
- Certificate of Installation Requirements
- Acceptance Testing Requirements

Certification and Verification Requirements

Both the Title 20 Appliance Efficiency Regulations and the 2013 Energy Standards refer to two categories of lighting controls:

- 1. Self-contained Lighting Control -- a unitary and independent lighting control module, in which no additional components are required, to provide a fully functional lighting control (often called a "device").
- 2. Lighting Control System -- involves the control of lighting using two or more components that are required to be field-installed, in order to provide all features and capabilities of a fully functional and compliant lighting control.

Self-contained Lighting Controls are regulated by the Title 20 Appliance Efficiency Regulations. They must be certified to, and listed in, the California Energy Commission's Appliance Efficiency Database (see http://www.appliances.energy.ca.gov/AdvancedSearch.aspx). Self-contained lighting controls can be verified for compliance with the 2013 Energy Standards by checking the Appliance Efficiency Database.

Lighting Control Systems must meet the requirements of Section 110.9, and comply with the Lighting Control Installation Certificate Requirements found in Section 130.4(b), of the 2013 Energy Standards.

Lighting Control Systems do not have to be certified to, nor be listed in, the Title 20 Appliance Efficiency Database. Note that some self-contained devices may also serve as components of a system, or may have additional functions when connected to a system. In these cases, the self-contained devices are expected to be certified for the functions they perform as a stand-alone device, but do not require additional certification to be installed as part of a lighting control system.

Examples of Lighting Control Systems:

- A typical lighting control system will consist of two or more components, both required for the control system to operate. For example, a "field-assembled networked lighting control system," consisting of a photo sensor working in conjunction with a separate controller and remote relay component, may make a fully functional and compliant lighting control system.
- 2. An Energy Management Control System, installed to function as a lighting control and functionally meeting all applicable requirements of each application for which it is installed, may make a fully functional and compliant lighting control system.

For more information on requirements of Self-contained Lighting Controls and Lighting Control Systems, see the 2013 Energy Standards Section 110.9 and 2013 Nonresidential Compliance Manual Sections 5.2.2, 5.2.3, and 5.2.4.

Certificate of Installation Requirements

When a *Lighting Control System* (including an Energy Management Control System) has been installed to comply with the lighting control requirements in the 2013 Energy Standards, a Certificate of Installation NRCI-LTI-02-E must be completed and submitted to the enforcing agency, to facilitate inspection.

When *Self-contained Lighting Control* devices that have been certified to the Appliance Efficiency Database are installed, a Certificate of Installation NRCI-LTI-02-E is not required.

Lighting Control Certificate of Installation requirements can be found in Section 130.4(b) of the 2013 Energy Standards.

Acceptance Testing Requirements

Acceptance Testing is required for both *Self-contained Lighting Controls* and *Lighting Control Systems* to ensure that equipment, controls, and systems operate as required by the 2013 Energy Standards. Acceptance Testing must be performed by a certified Lighting Controls Acceptance Test Technician. For more information on the Acceptance Test Technician Certification Program, see http://www.energy.ca.gov/title24/attcp/

Help With the 2013 Energy Standards

For assistance with understanding or locating information in the 2013 Energy Standards, contact the Energy Standards Hotline at: (800) 772-3300 (toll-free in California); (916) 654-5106 (outside California); or, via email at title24@energy.ca.gov

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